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Downers Grove Public Wells Nos. 6 & 8
ILD981958382
Site Reconnaissance Visit Summary

On September 6, 1991, John Quinn and John Chitwood of B&V Waste Science and Technology Corp. (BVWST) conducted an inspection of Downers Grove Public Wells No. 6 and No. 8. Downers Grove Water and Storm Superintendent, Mr. Randy Siemaszek, was the site representative present at the inspection. The site inspection began at approximately 9:30 a.m. and was completed by 11:00 a.m. The temperature was in the mid-70's and it was sunny.

In an interview with Mr. Siemaszek, he described how the Downers Grove water system functions. Collectively, several water towers in Downers Grove have a total storage capacity of eight million gallons. Water towers and wells are connected to a continuous loop system which enables one standpipe in each tower to serve as both a recharge and discharge line. When the water level drops to a certain level in a given tower, one or two wells are automatically activated raising the system pressure in the vicinity of the tower, causing water to flow back into the tower until a suitable water level is reached and the wells are deactivated. Water entering the system is treated at the well head by injection of fluoride, chlorine, and polyphosphate, negating the need for a central treatment plant.

According to Mr. Siemaszek, the nature of Downers Grove's water system contributed to the EPA concerns about organic solvent contamination in well numbers 6 and 8. By feeding directly into supply lines, each contaminated well potentially induces unacceptably high concentrations of organic solvents in their local part of the system which is subsequently diluted by mixing with clean water in the system, placing water users in close proximity to contaminated wells at risk. Mr. Siemaszek noted that well numbers 6, 8, 10, and 11 have all shown measurable concentrations of organic solvents with well no. 6 occasionally showing unacceptably high organic solvent concentrations.

Some water-related health concerns have been voiced in Downers Grove. Mr. Siemaszek stated some doctors have theorized respiratory ailments exhibited by some newborn infants in Downers Grove may be related to water contamination. It was not known if any affected infants or families live in close proximity to those Downers Grove municipal wells known to produce organic solvent contaminated water.

Well No. 8 was plugged and abandoned in February 1991. Milaeger Well & Pump of 910 North Milwaukee, Wheeling, Illinois, 60090, was the plugging contractor. Mr. Siemaszek did not know the exact intervals plugged, but stated that a concrete plug was placed in the lower part of the well, pea gravel in the middle and upper part, and a concrete cap was poured on the top and presumably in the upper few feet of the well. Well No. 8 was abandoned because it could no longer produce sufficient volumes of groundwater to warrant continued operation.

Well No. 8's ivy-covered single story wellhouse is still intact and appears to be structurally sound. The well is located in the middle of a metered public parking lot in downtown Downers Grove. In the near future, probably 1992, the wellhouse will be razed and a multi-level parking facility constructed on the site.

Well No. 6 is housed in a brick single story structure similar to that housing well No. 8. Also known as the Lee Well because of its location on Lee Street, Well No. 6 is located approximately two hundred feet from St. Joseph Creek, in a residential area. The wellhouse is structurally sound and has a new roof. Well No. 6 has a blow-by line (approximately 8-inch diameter) which drains into St. Joseph Creek through a short storm sewer. When active, Well No. 6 pumps at a rate of 1,000 gallons per minute, drawing water from a shallow bedrock aquifer.

With the impending delivery of Lake Michigan water to the Downers Grove system in 1992, the city intends to abandon several wells, maintaining five wells on a standby basis. Well No. 6 is scheduled to be abandoned in 1992.

Mr. Siemaszek stated that samples from Well No. 6 taken the last four quarters show organic solvent concentrations within acceptable limits. He also noted that the water system as a whole has never shown unacceptably high organic solvent concentrations. Mr. Siemaszek will copy and send us analytical test results of quarterly samples taken from Well Nos. 6 and 8 in recent years. He will also obtain and send BVWST a copy of a 1985 IEPA report on the Downers Grove municipal wells.

Mr. Siemaszek noted the source of organic solvent contamination has not been determined. He mentioned that some dry cleaners exist in the area, but none have been directly linked to the spread of organic solvents in local aquifers.

According to Mr. Siemaszek, air stripping has been suggested as a remedial treatment technology, but the impending conversion to Lake Michigan water lessens the urgency for remedial action.

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